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(54) **METHOD OF MAKING ACTIVE MATERIALS FOR USE IN SECONDARY ELECTROCHEMICAL CELLS**

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See application file for complete search history.

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(57) **ABSTRACT**

The present invention provides for the preparation of an "optimized" VPO_4 phase or V—P—O/C precursor. The VPO_4 precursor is an amorphous or nanocrystalline powder. The V—P—O/C precursor is amorphous in nature and contains finely divided and dispersed carbon. Throughout the specification it is understood that the VPO_4 precursor and the V—P—O/C precursor materials can be used interchangeably to produce the final vanadium phosphates, with the V—P—O/C precursor material being the preferred precursor. The precursors can subsequently be used to make vanadium based electroactive materials and use of such precursor materials offers significant advantages over other processes known for preparing vanadium phosphate compounds.

15 Claims, 21 Drawing Sheets